

AMENDMENT OF THE CLAIMS

1. (currently amended) A continuous catalytic hydrogenation process, ~~comprising~~ comprising recirculating a reaction mixture containing the substance to be hydrogenated, hydrogenation product, hydrogen and hydrogenation catalyst suspended in the reaction mixture in a reactor, removing part of the hydrogenation product from the reactor, mixing together the substance to be hydrogenated and the hydrogen before entering the reactor and then feeding the substance to be hydrogenated and hydrogen into the reactor.
2. (original) The process according to claim 1, further comprising mixing of the substance to be hydrogenated and hydrogen so that the diameter of gas bubbles produced thereby is no more than 2.5 mm.
3. (original) The process according to claim 2, further comprising mixing of the substance to be hydrogenated and hydrogen so that the diameter of gas bubbles produced thereby is less than 1.5 mm.
4. (original) The process according to claim 1, wherein a venturi nozzle, a perforated plate or frit is used for mixing said substance to be hydrogenated and the hydrogen.
5. (original) The process according to claim 2, wherein a venturi nozzle, a perforated plate or frit is used for mixing said substance to be hydrogenated and the hydrogen.

6. (original) The process according to claim 3, wherein a venturi nozzle, a perforated plate or frit is used for mixing said substance to be hydrogenated and the hydrogen.
7. (original) The process according to claim 1, wherein the substance to be hydrogenated and hydrogen form a system that is coalescence-inhibited.
8. (original) The process according to claim 2, wherein the substance to be hydrogenated and hydrogen form a system that is coalescence-inhibited.
9. (original) The process according to claim 3, wherein the substance to be hydrogenated and hydrogen form a system that is coalescence-inhibited.
10. (original) The process according to claim 4, wherein the substance to be hydrogenated and hydrogen form a system that is coalescence-inhibited.
11. (original) The process according to claim 7, further comprising wherein systems in which the sum quotient of all specific interfacial surface tensions of the components involved in the system reaches a value of at least 16 mN/m are used as the coalescence-inhibited systems.
12. (original) The process according to claim 1, wherein the hydrogen and substance to be hydrogenated form a mixture that possesses a gas proportion of 40 vol.% to 80 vol.%.

13. (original) The process according to claim 1, wherein the reactor is free from inserts.
14. (original) The process according to claim 1, wherein the reactor is a stirred vessel, a gas-lift reactor, a fluidized-bed reactor or a loop reactor.
15. (original) The process according to claim 1, further comprising using substituted anthraquinone or a mixture of substituted anthraquinones and/or ring-hydrogenated tetrahydro derivatives thereof as the substance to be hydrogenated.
16. (original) The process according to claim 1, further comprising in that the substance to be hydrogenated is introduced as such or in solution.
17. (original) The process according to claim 2, further comprising in that the substance to be hydrogenated is introduced as such or in solution.
18. (original) The process according to claim 4, further comprising in that the substance to be hydrogenated is introduced as such or in solution.
- 19-21. (canceled)